

AMENDMENTS TO THE CLAIMS

In the set of claims within the Application, please amend claims 1-20 as hereinafter indicated.

1. (Currently Amended) A target selection system for a vehicle, said target selection system comprising:

at least one object detection sensor for generating object detection signals associated with a plurality of objects;

a feature target selection module for selecting secondary targets from said plurality of objects and associating said secondary targets with a plurality of respective features; and

a primary target selection module for selecting primary targets from said secondary targets and associating each of said primary targets with a single respective concentrated feature.

2. (Currently Amended) A target selection system as in claim 1, wherein said single respective concentrated feature is selected from said plurality of respective features.

3. (Currently Amended) A target selection system as in claim 1, said target selection system further comprising:

a path prediction module for determining at least one predicted path estimation of said vehicle; and

a diagnostic module for determining positions of said plurality of objects in response to said at least one predicted path estimation;

wherein said feature target selection module selecting is operable to select said secondary targets in response to [[said]] the determined positions.

4. (Currently Amended) A target selection system as in claim 3, wherein said path prediction module determines is operable to determine a resultant predicted future path and an associated path confidence level in response to said at least one predicted path estimation and said diagnostic module, and said diagnostic module determining is operable to determine said positions in response to said predicted future path and said confidence level.

5. (Currently Amended) A target selection system as in claim 1, said target selection system further comprising:

an object tracker module for tracking said plurality of objects and generating an object data field[.];

wherein said feature target selection module ~~selecting~~ is operable to select said secondary targets in response to said object data field.

6. (Currently Amended) A target selection system as in claim 5, wherein said ~~[[said]]~~ object tracker module ~~[[tags]]~~ is operable to tag at least one of said plurality of objects as new and tracks track previously detected objects.

7. (Currently Amended) A target selection system as in claim 5, wherein said object data field ~~comprises~~ includes:

an object list; and

object associated characteristic data.

8. (Currently Amended) A target selection system as in claim 7, wherein said object associated characteristic data ~~comprises~~ includes at least one type of data selected from at ~~least one the list consisting of~~ range data, range-rate data, angle data, position data, shape data, size data, weight data, classification data, certainty indices, and confidence levels.

9. (Currently Amended) A target selection system as in claim 1, said target selection system further comprising:

a cue information request module for generating target information request signals[.];

wherein said at least one object detection sensor ~~generating~~ is operable to generate said object detection signals in response to said target information request signals.

10. (Currently Amended) A target selection system as in claim 9, wherein said cue information request module ~~generates~~ is operable to generate a first information request signal associated with a first primary target and also a second information request signal associated with a second primary target.

11. (Currently Amended) A target selection system as in claim 9, wherein said at least one object detection sensor ~~adjusts~~ is operable to adjust sensor settings in response to said target information request signals.

12. (Currently Amended) A target selection system as in claim 9, wherein said cue information request module ~~generates~~ is operable to generate a first information request signal associated with a first secondary target and also a second information request signal associated with a second secondary target.

13. (Currently Amended) A target selection system as in claim 1, wherein said feature target selection module ~~selects~~ is operable to select a first set of secondary targets associated with a first feature and also a second set of secondary targets associated with a second feature.

14. (Currently Amended) A target selection system as in claim 1, wherein said primary target selection module ~~selects~~ is operable to select a first primary target associated solely with a first feature and also a secondary target associated solely with a second feature.

15. (Currently Amended) A target selection system as in claim 1, wherein said primary target selection module ~~selects~~ is operable to select a set of primary targets associated with a particular feature.

16. (Currently Amended) A countermeasure system for a vehicle, said countermeasure system comprising:

at least one object detection sensor for generating object detection signals associated with a plurality of objects;

a feature target selection module for selecting secondary targets from said plurality of objects and associating said secondary targets with a plurality of respective features;

a primary target selection module for selecting primary targets from said secondary targets and associating each of said primary targets with a single respective concentrated feature; and

a controller for performing at least one countermeasure in response to said primary targets.

17. (Currently Amended) A countermeasure system as in claim 16, said countermeasure system further comprising:

a path prediction module for determining a resultant predicted future path of ~~[[the]]~~ said vehicle and an associated path confidence level; and

a diagnostic module for determining positions of said plurality of objects in response to said resultant predicted future path and said path confidence level;

wherein said feature target selection module ~~selecting~~ is operable to select said secondary targets in response to ~~[[said]]~~ the determined positions.

18. (Currently Amended) A target selection system for a vehicle, said target selection system comprising:

at least one object detection sensor for generating object detection signals associated with a plurality of objects;

a plurality of vehicle state sensors for generating vehicle state signals;

a path-tracking module for generating a path-tracking signal;

a path prediction module for generating at least one path-prediction signal in response to said vehicle state signals, said path prediction module ~~determining~~ being operable to determine a resultant predicted future path of ~~[[the]]~~ said vehicle and an associated path confidence level in response to said at least one ~~path-prediction~~ path-prediction signal and said ~~path-tracking~~ path-tracking signal; and

a controller for determining threat of each of said plurality of objects in response to said object detection signals and selecting at least one primary target for a plurality of features in response to said resultant predicted future path, said associated path confidence level, and said threat.

19. (Currently Amended) A target selection system as in claim 18, wherein:

said controller, ~~[[in]]~~ for selecting said at least one primary target, ~~determines~~ is operable to determine a highest threat object of said plurality of objects for said plurality of features~~[[,]]~~; and

said controller ~~performing~~ is operable to perform a countermeasure in response to said primary target.

20. (Currently Amended) A target selection system as in claim 18, wherein said controller comprises:

a feature target selection module for selecting secondary targets from said plurality of objects and associating said secondary targets with said plurality of features; and

a primary target selection module for selecting said at least one primary target from said secondary targets and associating each of a plurality of concentrated features with said at least one primary target.